

CLAIMS

1.(Canceled)

2.(Canceled)

3.(Currently amended) A mold assembly ~~as claimed in claim 2~~ for use in a plastic blow molding process, the mold assembly comprising:

a mold cavity shell made by nickel vapour deposition;

the mold cavity shell having a cavity portion including a front face, a rear face and peripheral edge portions, the front face defining a cavity in the shape of a portion of a product to be molded;

the mold cavity shell also having coplanar, peripheral side portions attached to said peripheral edge portions, the side portions defining front surfaces adapted to mate with corresponding surfaces of a mating mold cavity shell to define the product to be molded;

a mold holder located rearwardly of the mold cavity shell;

means for releasably connecting the mold holder to the peripheral side portions; and

the mold holder defining an inner wall spaced from the rear face of the mold cavity portion to define a heat transfer passage between said inner wall and said cavity portion, the mold holder inner wall being formed with wherein the flow enhancement surface irregularities in the form of are a series of parallel grooves.

4.(Canceled)

5.(Currently amended) A mold assembly ~~as claimed in claim 4~~ wherein the for use in a plastic blow molding process, the mold assembly comprising:

a mold cavity shell made by nickel vapour deposition;

the mold cavity shell having a cavity portion including a front face, a rear face

and peripheral edge portions, the front face defining a cavity in the shape of a portion of a product to be molded, the rear face being formed with structural enhancement ribs are in the form of a series of parallel spaced apart ribs;

the mold cavity shell also having coplanar, peripheral side portions attached to said peripheral edge portions, the side portions defining front surfaces adapted to mate with corresponding surfaces of a mating mold cavity shell to define the product to be molded;

a mold holder located rearwardly of the mold cavity shell;

means for releasably connecting the mold holder to the peripheral side portions; and

the mold holder defining an inner wall spaced from the rear face of the mold cavity portion to define a heat transfer passage between said inner wall and said cavity portion.

6.(Canceled)

7.(Currently amended) A mold assembly ~~as claimed in claim 6~~ for use in a plastic blow molding process, the mold assembly comprising:

a mold cavity shell made by nickel vapour deposition;

the mold cavity shell having a cavity portion including a front face, a rear face and peripheral edge portions, the front face defining a cavity in the shape of a portion of a product to be molded;

the mold cavity shell also having coplanar, peripheral side portions attached to said peripheral edge portions, the side portions defining front surfaces adapted to mate with corresponding surfaces of a mating mold cavity shell to define the product to be molded;

a mold holder located rearwardly of the mold cavity shell, the mold holder having peripheral parting line portions located outwardly of the mold cavity shell peripheral side portions, wherein the mold holder peripheral parting line portions having front faces extending slightly forwardly of the mold cavity shell side portion front surfaces;

means for releasably connecting the mold holder to the peripheral side portions;

and the mold holder defining an inner wall spaced from the rear face of the mold cavity portion to define a heat transfer passage between said inner wall and said cavity portion.

8.(Original) A mold assembly as claimed in claim 7 wherein the front faces extend forwardly a distance of between 0.002 and 0.003 inches (0.051 and 0.076 millimeteres) so that when the mold assembly is mated to a corresponding mating mold assembly, a gap of between 0.004 and 0.006 inches (0.102 and 0.152 millimetres) is present between the mating mold cavity shell side portion front surfaces.

9.(Currently amended) A mold assembly ~~as claimed in claim 1 wherein~~ for use in a plastic blow molding process, the mold assembly comprising:

a mold cavity shell made by nickel vapour deposition;

the mold cavity shell having a cavity portion including a front face, a rear face and peripheral edge portions, the front face defining a cavity in the shape of a portion of a product to be molded;

the mold cavity shell also having coplanar, peripheral side portions attached to said peripheral edge portions, the side portions defining front surfaces adapted to mate with corresponding surfaces of a mating mold cavity shell to define the product to be molded;

a mold holder located rearwardly of the mold cavity shell;

means for releasably connecting the mold holder to the peripheral side portions;

the mold holder defining an inner wall spaced from the rear face of the mold cavity portion to define a heat transfer passage between said inner wall and said cavity portion; and the peripheral side portions have having locating registering means and the mold holder has having corresponding locating registering means adapted to receive the peripheral side portion locating registering means.

10.(Original) A mold assembly as claimed in claim 9 wherein the peripheral side portion locating registering means and the mold holder locating registering means are adapted to receive a threaded fastener.

11.(Canceled)

12.(Canceled)

13.(Canceled)

14.(Canceled)

15.(Canceled)

16.(Canceled)

17.(Canceled)

18. (Currently amended) A mold assembly ~~as claimed in claim 17~~ for use in a plastic blow molding process, the mold assembly comprising:

a mold cavity shell made by nickel vapour deposition;

the mold cavity shell having a cavity portion including a front face, a rear face and peripheral edge portions, the front face defining a cavity in the shape of a portion of a product to be molded;

the mold cavity shell also having coplanar, peripheral side portions attached to said peripheral edge portions, the side portions defining front surfaces adapted to mate with corresponding surfaces of a mating mold cavity shell to define the product to be molded;

a mold holder located rearwardly of the mold cavity shell;

means for releasably connecting the mold holder to the peripheral side portions;

the mold holder defining an inner wall spaced from the mold cavity portion to define a heat transfer passage between said inner wall and said cavity portion; and

wherein the mold holder inner wall is formed with flow enhancement surface irregularities ~~are in the form of~~ a series of parallel grooves.

19.(currently amended) A mold assembly for use in a plastic blow molding process, the mold assembly comprising:

a mold cavity shell made by nickel vapour deposition;

the mold cavity shell having a cavity portion including a front face, a rear face and peripheral edge portions, the front face defining a cavity in the shape of a portion of a product to be molded;

the mold cavity shell also having coplanar, peripheral side portions attached to said peripheral edge portions, the side portions defining front surfaces adapted to mate

with corresponding surfaces of a mating mold cavity shell to define the product to be molded;

a mold holder located rearwardly of the mold cavity shell;

means for releasably connecting the mold holder to the peripheral side portions; and

the mold holder defining an inner wall spaced from the mold cavity portion to define a heat transfer passage between said inner wall and said cavity portion and the mold holder has peripheral parting line portions located outwardly of the mold cavity shell peripheral side portions; and

wherein the mold holder peripheral parting line portions have front faces extending slightly forwardly of the mold cavity shell side portion front surfaces

20.(Previously presented) A mold assembly as claimed in claim 19 wherein the front faces extend forwardly a distance of between 0.002 and 0.003 inches (0.051 and 0.076 millimeteres) so that when the mold assembly is mated to a corresponding mating mold assembly, a gap of between 0.004 and 0.006 inches (0.102 and 0.152 millimetres) is present between the mating mold cavity shell side portion front surfaces.

21.(currently amended) A mold assembly for use in a plastic blow molding process, the mold assembly comprising:

a mold cavity shell made by nickel vapour deposition;

the mold cavity shell having a cavity portion including a front face, a rear face and peripheral edge portions, the front face defining a cavity in the shape of a portion of a product to be molded;

the mold cavity shell also having coplanar, peripheral side portions attached to said peripheral edge portions, the side portions defining front surfaces adapted to mate with corresponding surfaces of a mating mold cavity shell to define the product to be molded;

a mold holder located rearwardly of the mold cavity shell;

means for releasably connecting the mold holder to the peripheral side portions; and

the mold holder defining an inner wall spaced from the mold cavity portion to define a heat transfer passage between said inner wall and said cavity portion; and

wherein the peripheral side portions have locating registering means and the mold holder has corresponding locating registering means adapted to receive the peripheral side portion locating registering means.

22.(Previously presented) A mold assembly as claimed in claim 21 wherein the peripheral side portion locating registering means and the mold holder locating registering means are adapted to receive a threaded fastener.

23.(Canceled)

24.(Canceled)